Kentucky's Technology Content Standards
based on the National Educational Technology Standards (NETS)

1.	**BASIC OPERATIONS AND CONCEPTS**	* Students demonstrate a sound understanding of the nature and operation of technology systems. * Students are proficient in the use of technology.
2.	**SOCIAL, ETHICAL, AND HUMAN ISSUES**	* Students understand the ethical, cultural, and societal issues related to technology. * Students practice responsible use of technology systems, information, and software.
3.	**TECHNOLOGY AS A TOOL FOR PRODUCTIVITY**	* Students use technology tools to enhance learning, increase productivity, and promote creativity. * Students use productivity tools to collaborate in constructing technology-enhanced models, preparing publications, and producing other creative works.
4.	**TECHNOLOGY AS A TOOL FOR COMMUNICATIONS**	* Students use technology to communicate, to collaborate, publish, and interact with peers, experts, and other audiences. * Students use a variety of media and formats to communicate information and ideas effectively to multiple audiences.
5.	**TECHNOLOGY AS A TOOL FOR RESEARCH**	* Students use technology to locate, evaluate, and collect information from a variety of sources. * Students use technology tools to process data and report results. * Students evaluate and select new information resources and technological innovations based on the appropriateness to specific tasks.
6.	T**ECHNOLOGY AS A TOOL FOR PROBLEM-SOLVING AND DECISION-MAKING**	* Students use technology resources for solving problems and making informed decisions. * Students employ technology in the development of strategies for solving problems in the real world.

Educational Technology Content Standards and Grade Cluster Benchmarks

	CONTENT STANDARDS	**K - 3**	**4 - 5**
1.	BASIC OPERATIONS AND CONCEPTS Students demonstrate a sound understanding of the nature and operation of technology systems. Students are proficient in the use of technology.	• Use input devices for computers such as the mouse, keyboard, and microphone and various information storage devices such as disk drives. • Use a variety of media and technology resources for directed and independent learning activities and the creation of products. • Communicate appropriate terminology for technology tools and concepts. • Demonstrate proper care procedures for hardware and software devices.	• Use keyboard commands, menu commands, toolbars, and other navigational tools in the operation of software that extends beyond minimal functions (e.g., advanced word processing skills, more complex graphics manipulation, automated macro functions, etc.). • Identify and understand the differences between non-networked and networked computers.
2.	SOCIAL, ETHICAL AND HUMAN ISSUES Students understand the ethical, cultural, and societal issues related to technology. Students practice responsible use of technology systems, information, and software	• Work as a contributing member of a team (which can include peers and others) when using technology in the classroom. • Describe and personally demonstrate positive social and ethical behaviors when using technology or as a means of communication or creating a product or service. • Give reasons for exercising appropriate caution when using the Internet. • Describe and demonstrate the ability to practice responsible use of technology systems and software. • **Identify the ways in which concepts of personal property apply to technology.**	• Identify and take a position on basic issues related to responsible use of technology and information; and describe personal consequences of inappropriate use. • Give examples of common uses of technology in daily life and the advantages and disadvantages of those uses. • Can explain the capabilities and limitations of the different technological media and how the influence the communication of messages.

3.	TECHNOLOGY AS A TOOL FOR PRODUCTIVITY Students use technology tools to enhance learning, increase productivity, and promote creativity. Students use productivity tools to collaborate in constructing technology enhanced models, preparing publications, and producing other creative works.	• Create appropriate multimedia products and presentations appropriate to own developmental level. • Know features and uses of current and emerging technology. • Use similar technology resources (e.g., puzzles, logical thinking programs, writing tools, digital cameras, drawing tools) for problem solving, communication, and illustration of thoughts, ideas, and stories.	• Use general purpose productivity tools (word processor, spreadsheet, and database) and peripherals to support personal productivity, and to facilitate learning throughout the curriculum and to remediate skill deficits. • Use technology tools (e.g., multimedia authoring, presentation, web tools, digital cameras, scanners) for individual and collaborative writing, communication, and publishing activities to create knowledge products for audiences inside and outside the classroom.

Educational Technology Content Standards and Grade Cluster Benchmarks

	CONTENT STANDARDS	6 - 8	9 - 12
1.	BASIC OPERATIONS AND CONCEPTS Students demonstrate a sound understanding of the nature and operation of technology systems. Students are proficient in the use of technology.	• Identify, describe and apply strategies for identifying and solving routine hardware and software problems that occur during every day use. • Know features and uses of current and emerging technology	• Make informed choices among technology systems, resources, and services (e.g., cost-benefit analysis).
2.	SOCIAL, ETHICAL AND HUMAN ISSUES Students understand the ethical, cultural, and societal issues related to technology. Students practice responsible use of technology systems, information, and software	• Demonstrate knowledge of current changes in information technologies and the effect those changes have on the workplace and society. • Give reasons for the establishing of guidelines for legal and ethical behaviors when using information and technology, and discuss responsible use. • Identify, compare, and contrast the impact and effects of technology.	• Analyze advantages and disadvantages of widespread use of and reliance on technology in the workplace and in society as a whole.
3.	TECHNOLOGY AS A TOOL FOR PRODUCTIVITY Students use technology tools to enhance learning, increase productivity, and promote creativity. Students use productivity tools to collaborate in constructing technology-enhanced models, preparing publications, and producing other creative works.	• Use content specific tools, software, and simulations (e.g., environmental probes, graphing calculators, exploratory environments, web tools) to support learning and research. • Apply productivity/ multimedia tools and peripherals to support personal and group productivity and collaboration and learning throughout the curriculum.	• Use technology tools and resources for managing and communicating information in situations individuals encounter in the world of work. • Identify and use advanced features of software programs used in previous grade levels.

	CONTENT STANDARDS	**K - 3**	**4 - 5**
4.	TECHNOLOGY AS A TOOL FOR COMMUNICATIONS Students use technology to communicate, to collaborate, publish, and interact with peers, experts, and other audiences. Students use a variety of media and formats to communicate information and ideas effectively to multiple audiences.	• Access, process, organize, and communicate information using the appropriate technology communication tools to gather information and to communicate with others (e.g., Using e-mail, the Internet, video, telephone, word-processor or paper - and- pencil to create a class poster on a selected theme). • Describe various technology tools and their functions in communication.	• Use telecommunications efficiently and effectively to access remote information and communicate with others in support of directed and independent learning and for pursuit of personal interests. • Explain the advantages and disadvantages in the use of various technologies to deliver information for a target audience. (e.g., compare communication through video over mass media; e-mail over the Internet, CD-ROM, or person-to-person.
5.	TECHNOLOGY AS A TOOL FOR RESEARCH Students use technology to locate, evaluate, and collect information from a variety of sources. Students use technology tools to process data and report results. Students evaluate and select new information resources and technological innovations based on the appropriateness to specific tasks.	• Identify and use print and electronic sources of databases in the collection, organization, and display of data. • Process information retrieved electronically (e.g., retrieving some statistical information over the Internet and turning the information into a chart or graph).	• Determine appropriate technology tools for accessing information and resources. • Develop media literacy by identifying the source of information and the point of view presented for analysis of any bias (e.g., distinguishes whether material retrieved over the Internet is fact or opinion and whether the source is primary or secondary).
6.	TECHNOLOGY AS A TOOL FOR PROBLEM-SOLVING AND DECISION-MAKING Students use technology resources for solving problems and making informed decisions. Students employ technology in the development of strategies for solving problems in the real world.	• Describe and explain a simple information system that has input, process, output and feedback.	• Give examples of how technology can be used in everyday life to solve problems and influence decisions we make. • Describe how technology affects our world, our society, and ourselves. • Construct technological information systems which use input, process, output and feedback.

Educational Technology Content Standards and Grade Cluster Benchmarks

	CONTENT STANDARDS	6 - 8	9 - 12
4.	TECHNOLOGY AS A TOOL FOR COMMUNICATIONS Students use technology to communicate, to collaborate, publish, and interact with peers, experts, and other audiences. Students use a variety of media and formats to communicate information and ideas effectively to multiple audiences.	• Design, develop, publish, and present products (e.g., Web pages, video tapes) using appropriate technology resources that demonstrate and communicate curriculum concepts to audiences inside and outside the classroom. • Collaborate with peers, experts, and others using telecommunications and collaborative tools to investigate curriculum-related problems, issues, and information and to develop solutions or products for audiences inside and outside the classroom.	• Routinely and effectively use on-line information resources to meet needs for collaboration, research, publication, communication, and productivity.
5.	TECHNOLOGY AS A TOOL FOR RESEARCH Students use technology to locate, evaluate, and collect information from a variety of sources. Students use technology tools to process data and report results. Students evaluate and select new information resources and technological innovations based on the appropriateness to specific tasks.	• Select and use appropriate tools and information technology resources to accomplish a variety of tasks and solve problems. • Research and evaluate the accuracy, relevance, appropriateness, comprehensiveness, and bias of electronic information sources concerning real-world problems.	• Select and apply information technology tools for research, information analysis, problem solving, and decision-making in learning activities that involve issues or complex topics. • Evaluate technology-based options, including distance and distributed education, for self-directed learning.

Educational Technology Content Standards and Grade Cluster Benchmarks

6.	TECHNOLOGY AS A TOOL FOR PROBLEM-SOLVING AND DECISION-MAKING Students use technology resources for solving problems and making informed decisions. Students employ technology in the development of strategies for solving problems in the real world.	• Demonstrate an understanding of concepts underlying hardware, software, and connectivity, and practical applications to learning and problem solving.	• Investigate and apply expert systems, intelligent agents, and simulations in real-world situations. • Can give examples of how understanding of how things work and designing solutions to problems of almost any kind can be facilitated by systems analysis. • Identify a social, civic or economic issue and propose a technological solution.